

**Notice of Allowability**

Application No.

09/882,208

Examiner

Wesley A. Nicolas

Applicant(s)

CHEUNG ET AL.

Art Unit

1742

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment submitted 2/27/04.
2. ☒ The allowed claim(s) is/are 54-61.
3. ☒ The drawings filed on 13 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets" ) must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948 ) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

### **DETAILED ACTION**

This is in response to the Amendment submitted February 27, 2004. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 54-61 are currently pending in this application.

#### **Election/Restriction**

1. Cancellation of non-elected claims 29-52 by Applicant in the amendment submitted February 27, 2004 has been noted. Applicant may re-file said claims in a divisional application.

#### **Claim Rejections - 35 USC §§ 102 and 103**

2. The 35 U.S.C. §§ 102 and 103 rejections as set forth in the previous Office action have been **withdrawn** in view of Applicant's cancellation of claims 1-28 and 53 as set forth in the amendment submitted February 27, 2004.

#### **Allowable Subject Matter**

3. Claims 54-61 are allowed over the prior art of record.
4. The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 1742

Regarding claim 54, the specific method of adjusting an electrochemical bath for an electrochemical deposition process, comprising:

- identifying at least some of the one or more generated constituents by determining the first and second copper electroless bath compositions, and
- adding an additive material having a composition that is substantially the same as at least one or more generated constituents to a 3<sup>rd</sup> copper electroless bath to form a 4<sup>th</sup> copper electroless bath was not taught or suggested by the prior art of record.

Regarding claim 58, the specific method of adjusting an electrochemical bath for an electrochemical deposition process, comprising:


- identifying at least some of the one or more generated constituents by determining the first and second copper electrochemical bath compositions, and
- adding an additive material having a composition that is substantially the same as at least one or more generated constituents to a 3<sup>rd</sup> copper electrochemical bath to form a 4<sup>th</sup> copper electrochemical bath was not taught or suggested by the prior art of record.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley Nicolas whose telephone number is (571) 272-1247. The examiner can normally be reached on Mon.-Thurs. from 7 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached at (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Wesley A. Nicolas  
Primary Examiner

March 30, 2004